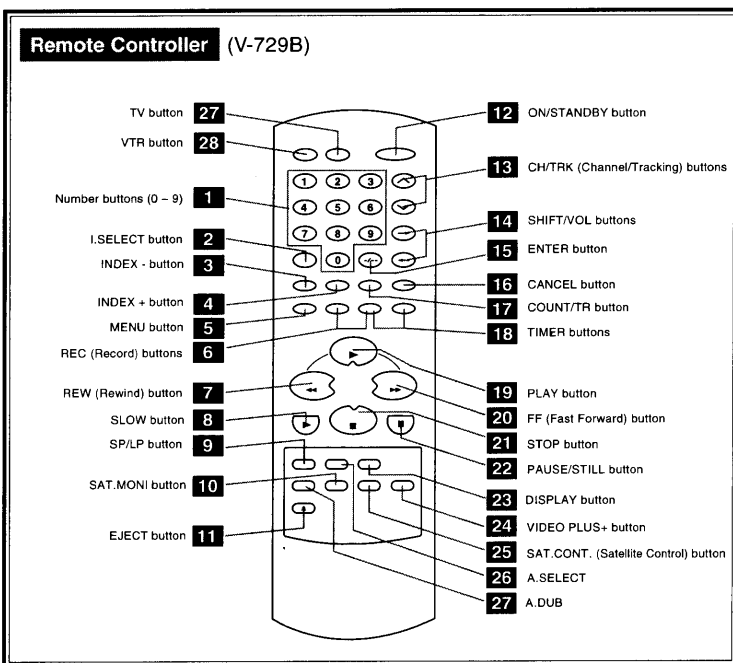
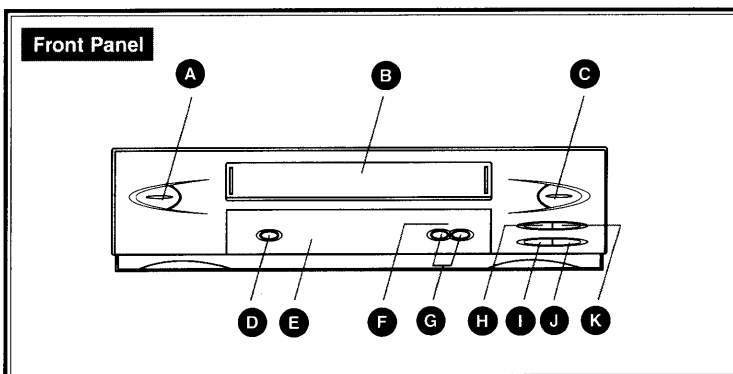
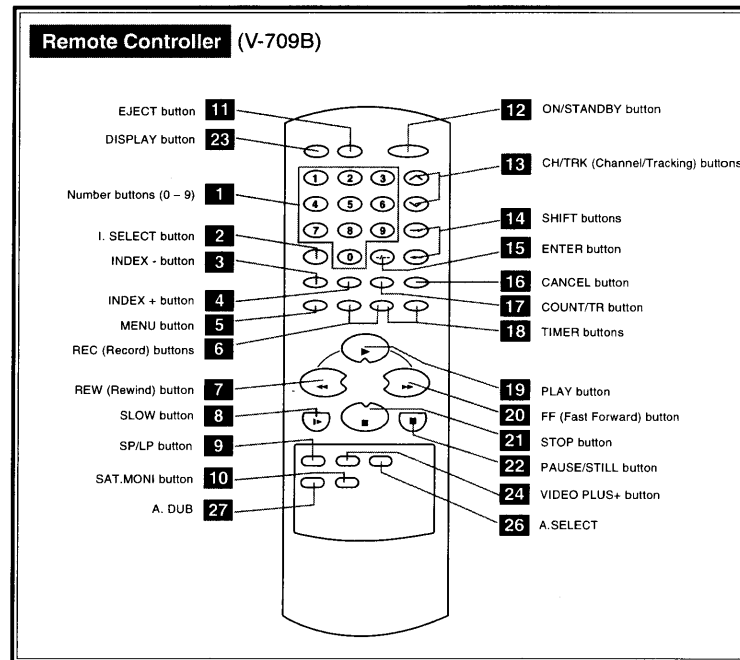


1 INTRODUCTION

IDENTIFICATION OF CONTROLS



6



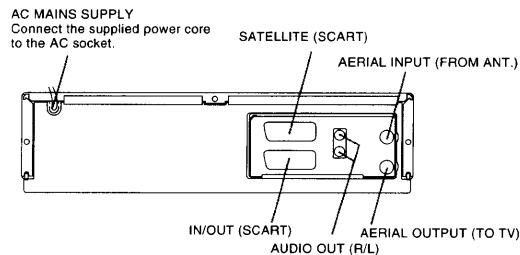
7

- A ON/STANDBY button
- B Cassette compartment
- C EJECT button
- D REC (Record) button
- E VTR display
- F Remote sensor
- G CHANNEL buttons
- H PLAY button
- I REW (Rewind) button
- J FF (Fast Forward) button
- K STOP buttons

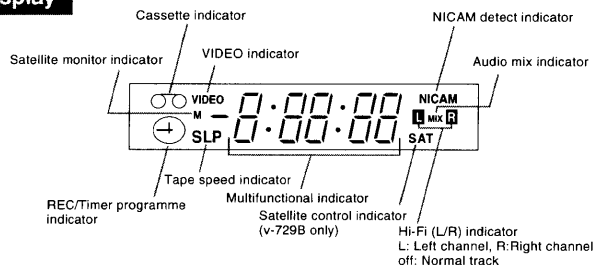
2. Reference Information

2-1 Operation of Controls

Rear Panel



VTR Display



1 4

INTRODUCTION

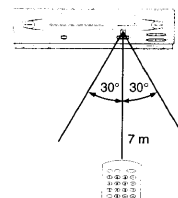
HOW TO USE THE REMOTE CONTROLLER

This section explains how to get ready for remote controller operation.

Setting up the Remote Controller

- 1 Open the battery compartment lid on the rear panel.
- 2 Install 2 batteries (R03 size) following the polarity diagrams.
- 3 Close the battery compartment lid.
- 4 Point the remote controller at the VTR and press the buttons within the operating range as illustrated.

Distance: within about 7 m from the front of the remote sensor
Angles: within about 30° in every direction



Notes on Batteries

- The life of the batteries is about 1 year depending on the conditions of use.
- If the remote controller does not operate correctly, replace all batteries with new ones.
- Do not dispose of the batteries by fire.
- If the remote controller is not to be used for a long period of time, remove the batteries to avoid possible damage from battery corrosion.

Caring for the Remote Controller

- When using the remote controller, press the buttons at intervals of about 1 second to ensure the correct mode of operation.
- Keep the remote controller away from extremely hot or humid places and avoid sharp impacts.
- Do not expose the remote sensor of the VTR to a strong light source such as direct sunlight or illumination.
- Be careful not to spill water on the remote controller or to place it on anything wet.

TOSHIBA TVs Control (V-729B Only)

The remote controller can control TOSHIBA TVs.

Press the TV button to set the remote controller operating your TV.

27

Point the remote controller at your TOSHIBA TV and use each button listed below to make sure that the TV is operated correctly.

ON/STANDBY	To turn the TV on or off.	12
CH	To select TV channels in the upper or lower direction.	13
VOL (Volume)	To adjust the sound level.	14
INPUT SELECT	To select an external source such as a VTR.	2
Number buttons/ ENTER button	To select TV channels. Way of use may differ with models of TV. Check how they work on your TV.	1 15

Ex. To select channel 3:

- 0→3
- 0→3→ENTER
- ENTER→3

To select channel 16:

- 1→6
- 1→6→ENTER
- ENTER→ENTER→1→6

Important

Some TVs may not respond to all the operations above, or may not be operated at all with this remote controller. In this case, operate your TV with its own remote controller.

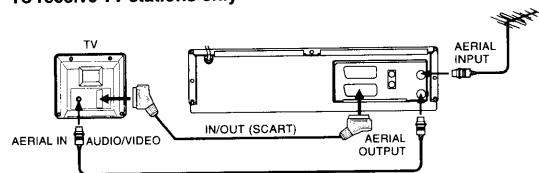
2 AUTO SET UP

The Auto Set Up function automatically tunes in TV stations, sets the clock and sets the RF out channel. All you have to do is to connect the VTR to the main antenna aerial and your TV, and then plug the power cord into the mains outlet.

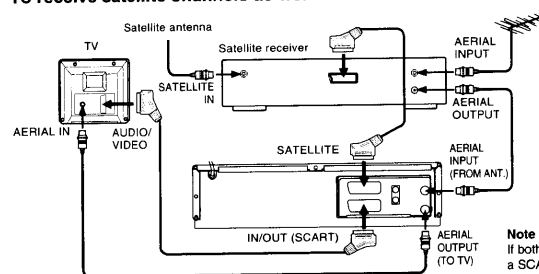
Auto Set Up

- 1 Connect the VTR to your TV with an aerial cable from the main antenna.

To receive TV stations only



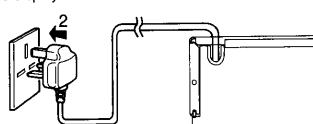
To receive satellite channels as well



Note
If both your TV and satellite receiver have a SCART socket, use a SCART cable (supplied for V-729B only) to connect the VTR.

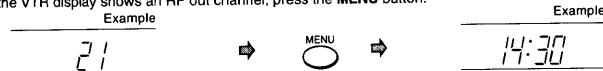
Turn on the satellite receiver and tune to SKY ONE.

- 2 Plug in the VTR to start its Auto Set Up. The display will flash "AUTO" for a few minutes.



The Auto Set Up is being carried out.

- 3 When the VTR display shows an RF out channel, press the MENU button.



The VTR automatically sets one of isolated vacant channels between 21 and 69 as the RF out channel.

When the auto set up completes, the display will show the time, e.g. "14:30".

Notes

- The Auto Set Up procedure above is available only on the first time you connect this VTR. See pages beginning from 36 for the next time.
- If you press the CANCEL button, the Auto Set Up is cancelled.
- If the VTR display shows "0:00" after flashing, no stations are stored. Make sure that the VTR and the TV are connected correctly, and perform "MANUAL SET UP" (page 36) to store your stations and set the clock.
- The TV stations in tuning range numbers 2 and 3 are not stored automatically in this procedure. To receive these stations, you must store them manually. See "Manual Storing of TV Stations" on page 37.

2 WATCHING THE VIDEO PICTURE

The way you operate this VTR to watch a video picture depends on whether you use a SCART cable or not.

For SCART Cable Users

- To watch a video picture from the VTR
Insert a cassette and press the **PLAY** button on the remote controller or front panel of the VTR.
- To watch or record a programme from the connected satellite receiver
Press the **I. SELECT** button so that "SA" indicator appears in the VTR display. (See page 34.)

19
H
2

For Non-SCART Cable Users (Setting the Video Channel)

The VTR signals are sent to your TV from the AERIAL OUTPUT socket. Your TV must have a channel set aside exclusively for these VTR signals. This is called the video channel.

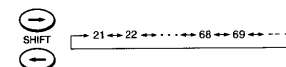
Preparation

Press the **VTR** button to set the remote controller operating the VTR.

28

Note on the RF Out Channel

- If you want to change the RF out channel after tuning, press the **SHIFT** buttons in step 4 to select the desired channel number. The number changes in the VTR display as follows.



14

- 1 Turn on the TV.
- 2 Select a free channel on the TV which you wish to use for your video picture, for example channel 9. This channel 9 will be only used for watching a video picture.

- 3 Press the **ON/STANDBY** button to turn on the VTR.



12
A

- 4 Hold down the **MENU** button for more than 5 seconds.



5

This is a case where the Auto Set Up has selected channel 21 as the RF out channel that transmits the VTR signal to the TV.

- 5 Press the **MENU** button. Video channel setting is complete.

5

2 AUTO SET UP CHECKING AUTO SET UP / CHANNEL SWAPPING

This section explains how to check if the TV stations are stored on the VTR correctly. If they are not stored correctly, you must enter them manually. (See page 37.)

Checking Auto Set Up

Using the **CH/TRK** buttons on the VTR's remote controller, check that the order of the TV stations stored on the VTR is as below. (This is important for the correct functioning of VIDEO Plus+ Deluxe.)

Position number	TV station
1	BBC1
2	BBC2
3	ITV
4	CHANNEL 4
5	CHANNEL 5
6	Satellite receiver

Position number 6 is reserved for a satellite receiver connected with an aerial cable. This position will be empty if there is no satellite receiver connected.

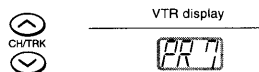
Any other stations are stored from position number 7 onward. If one of these has a better picture or is your preferred regional station, (e.g. Carlton instead of Meridian) then you can swap this into another position number. See the procedure below.

Channel Swapping

This VTR can move a TV station stored by Auto Set Up to another position number. This is called "Channel Swapping".

Example To move a TV station stored on position number 7 to position number 3.

1 Select position number 7 with the **CH/TRK** buttons.



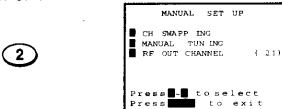
2 Press the **MENU** button. The MAIN MENU screen appears.



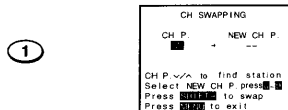
3 Press number button 3 to select "INSTALLATION".



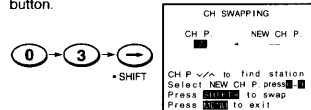
4 Press number button 2 to select "MANUAL SET UP".



5 Press number button 1. The following text will be superimposed over the position number you selected.



6 Press number button 0 and 3 to select a new position number, then press the **SHIFT** button.



7 To select another stored station to move, press the **CH/TRK** buttons and follow step 6.

8 Press the **MENU** button. Now Channel Swapping is complete. Further press the **MENU** button three times to return to the normal TV screen.

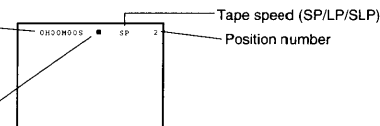
3 BASIC OPERATION ON SCREEN DISPLAY / VIDEO CASSETTE USE

This is basic information for the playback operation.

Displays and Indicators on the Screen

Pressing the **DISPLAY** button makes the operating mode appear. If you press this button again, the indication goes off, leaving the counter indication on the screen. To turn it off, press the **DISPLAY** button once more.

Counter indication
• Linear time counter
• Tape time remaining
• Clock
Each time the **COUNT/TR** button is pressed, the indication changes. (For details, see page 20.)



The indicator varies with the operating mode.

Ejecting a tape	▲
Stop	■
Fast-forwarding Forward picture search	▶▶
Rewinding Reverse picture search	◀◀
Recording	●
Recording pause	⏸
Playback	▶
Still picture Frame advance	⏮
Slow playback	▶▶

Note

In addition to the indication above, the VTR may display other indicators such as index search. See respective pages for each explanation.

Video Cassette Use

■ Loading a Cassette

Push the cassette into the cassette compartment with the window side facing up and the label side towards the front. The VTR is automatically turned on. The **CT** indicator will appear in the VTR display.



■ Ejecting a Cassette

Press the **EJECT** button. The cassette is ejected from the cassette compartment.

Warning

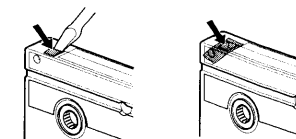
Do not insert your hands or any foreign objects into the compartment. This may result in injury or damage. Take special care with children to avoid accidents.

Precautions When Using Video Cassettes

Video cassettes have a safety tab to prevent accidental erasure. If the tab has been removed, recording cannot be performed.

■ To prevent accidental erasure
Remove this safety tab with a screwdriver.

■ To record again
Cover the tab hole with adhesive tape.



• Avoid exposing cassettes to direct sunlight. Keep them away from heaters.
Avoid extreme humidity, vibrations or shock, strong magnetic fields (near a motor, transformer or magnet) and dusty places.

3 BASIC OPERATION

ON SCREEN DISPLAY / VIDEO CASSETTE USE

This is basic information for the playback operation.

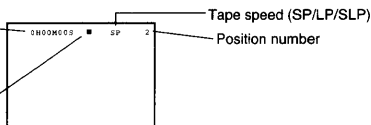
Displays and Indicators on the Screen

Pressing the **DISPLAY** button makes the operating mode appear. If you press this button again, the indication goes off, leaving the counter indication on the screen. To turn it off, press the **DISPLAY** button once more. 23

Counter indication

- Linear time counter
- Tape time remaining
- Clock

Each time the **COUNT/TR** button is pressed, the indication changes. (For details, see page 20.) 17



The indicator varies with the operating mode.

Ejecting a tape	▲
Stop	■
Fast-forwarding Forward picture search	▶▶
Rewinding Reverse picture search	◀◀
Recording	●
Recording pause	⏸
Playback	▶
Still picture Frame advance	⏮
Slow playback	▶▶

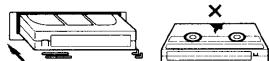
Note

In addition to the indication above, the VTR may display other indicators such as index search. See respective pages for each explanation.

Video Cassette Use

■ Loading a Cassette

Push the cassette into the cassette compartment with the window side facing up and the label side towards the front. The VTR is automatically turned on. The **○** indicator will appear in the VTR display. B



■ Ejecting a Cassette

Press the **EJECT** button. The cassette is ejected from the cassette compartment. C

Warning

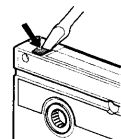
Do not insert your hands or any foreign objects into the compartment. This may result in injury or damage. Take special care with children to avoid accidents.

Precautions When Using Video Cassettes

Video cassettes have a safety tab to prevent accidental erasure. If the tab has been removed, recording cannot be performed.

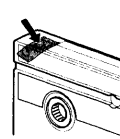
■ To prevent accidental erasure

Remove this safety tab with a screwdriver.



■ To record again

Cover the tab hole with adhesive tape.



- Avoid exposing cassettes to direct sunlight. Keep them away from heaters.
- Avoid extreme humidity, vibrations or shock, strong magnetic fields (near a motor, transformer or magnet) and dusty places.

3 BASIC OPERATION

RECORDING

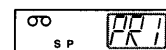
This section explains the basic recording operation. To record satellite programmes, see "SATELLITE" on pages 32 to 35.

Recording a TV Programme

Preparation

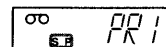
- Turn on the VTR.
- Select the video channel or video input mode on the TV.
- Press the **VTR** button to set the remote control operating the VTR (V-729B only). 28

- 1 Load a cassette with the safety tab attached. B
- 2 Select the TV programme (position number) to record with the **CHANNEL** buttons on the VTR, or the **CH/TRK** buttons or **number buttons** on the remote controller. 13, 1



If "L" or "SA" is displayed in the VTR display, press the **I.SELECT** button so that the position number appears. 2

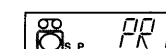
- 3 Press the **SP/LP** button to select the recording tape speed. 9



SP: Suitable for general recording with better picture and sound quality.

LP: Suitable for doubling recording time, but with less picture and sound quality than using the SP tape speed.

- 4 Press the **REC** button on the VTR, or simultaneously press the two **REC** buttons on the remote controller. Recording starts. D, 6



- 5 Press the **STOP** button to stop recording. 21, K

While recording, choose another channel using the channel selector on the TV.

Press the **PAUSE/STILL** button to stop recording momentarily. To resume recording, press the **PAUSE/STILL** button again. 22

Note

The VTR automatically shifts to the stop mode if the recording pause mode continues for 10 minutes.

3 4 BASIC OPERATION VIDEO Plus+ Deluxe PROGRAMMING SYSTEM RECORDING

You can easily programme a recording simply by entering the PlusCode programming number. The numbers are published in the TV listings of newspapers, TV guide magazine, etc.

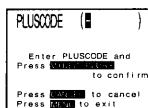
VIDEO Plus+ Deluxe Programming System Recording

Preparation

- Turn on the VTR.
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operating the VTR.
- Make sure that the clock is set correctly.
- Make sure that the TV stations have been stored properly (page 12).

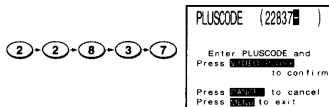
- Press the **VIDEO PLUS+** button.
The VTR enters the VIDEO Plus+ Deluxe programming system mode.

VIDEO PLUS+



- Enter the PlusCode programming number.
Example: To record a TV programme beginning at 18:00 on August 30, 1999 with PlusCode programming number 22837 (fiction).

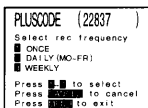
Press **number button 2, 2, 8, 3 and 7**.
Confirm that the entered number is correct.



- To correct the number, clear all digits by pressing the **CANCEL** button and re-enter a number.

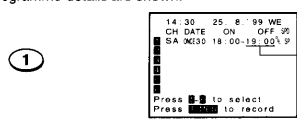
- Press the **VIDEO PLUS+** button.
The TV screen changes as follows:

VIDEO PLUS+



- ONCE:** One-time recording.
DAILY (MO-FR): Records TV programmes on the same TV channel at the same time Monday through Friday.
WEEKLY: Records TV programmes on the same TV channel at the same time on the same day every week.

- To select "ONCE" for example, press **number button 1**. The "ONCE" programming has been made automatically.
Programme details are shown.



Ex. If you set 10 minutes time extension on the **USER SETTING** screen (see below), "OFF" displays 19:10.

- To set PDC, move forward to "PDC" by the **SHIFT(→)** button, and press **number button 1**: if not set, press **number button 2**.

Note

If you have set the VTR to the satellite receiver control mode (SAT displayed), PDC cannot be set.

- To change the tape speed, press the **SP/LP** button.

- Press the **VIDEO PLUS+** button.
The programme setting is now memorized.

- To enter another PlusCode programming number, repeat steps 2 to 7.

- Finally press the two **TIMER** buttons simultaneously. The VTR enters the timer standby mode and the **⊙** indicator lights up.

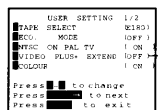


Setting Time Extension

Before making a VIDEO Plus+ Deluxe programming system recording, set possible time extension for the recording to allow for programme's overrun. You can extend the recording time in 10 minute increments up to 60 minutes.

- Press the **MENU** button to display the MAIN MENU screen.
- Press **number button 2** to select "USER SETTING".
- Press **number button 4** repeatedly to set desired time extension.

4



OFF - 60 - 50 - 40 - 30 - 20 - 10

- Press the **MENU** button twice to exit.

Notes

- Extend time should be set before starting VIDEO Plus+ Deluxe programming system recording procedure.
The time extending doesn't work on recording programmes already memorized.
- When you do not use time extension for VIDEO Plus+ Deluxe programming system recording, set to "OFF" on the **USER SETTING** screen.

Confirming the VIDEO Plus+ Deluxe Programming System Timer Programme

- Before the VTR enters the timer standby mode (**⊙** indicator not lit)

- Press the **MENU** button to display the MAIN MENU screen.
- Press **number button 1** to select "TIMER PROGRAMMING".

1



Check the programmed data.

- Press the **MENU** button twice to exit.

- During the timer programme recording (**⊙** indicator lit)

Press the **MENU** button.
The screen for confirming appears.

MENU



After about 30 seconds, the screen disappears.

Cancelling the Video Plus+ Deluxe Programming System Timer Programme

- If the **⊙** indicator is lit, press the two **TIMER** buttons to turn it off, and turn on the VTR by pressing the **ON/STANDBY**.
- Press the **MENU** button to display the MAIN MENU screen.
- Press **number button 1** to select "TIMER PROGRAMMING".
- Select a program number which you want to cancel by using **number buttons**.
- Press the **CANCEL** button.
The line is cleared out.
- Press the **MENU** button.

Recording or Playback in the Timer Standby Mode

First press the two **TIMER** buttons to release the timer standby mode, and then press the **ON/STANDBY** button to turn on the VTR. The VTR will be available for use.

- Be sure to press the two **TIMER** buttons again to return the VTR to the timer standby mode after you operate.

If a Power Failure Occurs During the Timer Programme Recording

- If the **⊙** indicator is missing in the VTR display after the power failure, the programmed contents have been cleared. Reset the timer programming.
- When power has failed for a short time, the colon of the current time display blinks. The programmed contents are not affected. Reset the clock.

Error Indicators

When the "Full (Clear prog?)" message appears on the TV during programming, no more programmes can be entered. If you want to add another programme, select one existing programme on the screen by using number buttons, and press the **CANCEL** button to delete it.

If impossible PlusCode programming number is entered, "Invalid code entered" blinks on the screen to tell you that the recording cannot be performed. Press the **CANCEL** button to clear the PlusCode programming number and enter correct one.

If "Clash" message appears on the screen during programming, it tells you that two programmes with the same recording start time have been entered. You have to make a correction. On this screen, item number means that the item has been entered later.

- Enter the number of the programme you want to correct using **number buttons**.
- Correct the timer programme data, or clear the data by pressing the **CANCEL** button and then press the **VIDEO PLUS+** button to enter the PlusCode programming number.

Overlaps of the programmes

If two programmes overlap, the recording start time of programme 2 has a priority over the recording end time of programme 1.



3 BASIC OPERATION

5 TIMER PROGRAMME RECORDING

The programmable timer allows you to record up to 6 different programmes over one month.

Timer Programming Procedure

Preparation

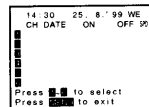
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote controller operating the VTR.
- Turn on the VTR.
- Make sure that the clock is set correctly.

Example

To record a programme of a station stored on position number 1 (e.g. BBC1) in the SP tape speed from 21:30 until 22:00 on August 30. Today is August 25.

- 1 Load a cassette with the safety tab attached.
- 2 Press the MENU button. The MAIN MENU screen appears.

- 3 Press number button 1 to select "TIMER PROGRAMMING".

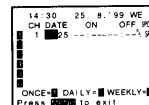


Programme number 1 is ready to accept your input.

- 4 Select an empty programme number using number buttons 1 to 6.



- 5 To select position number 1, press number button 0 and 1.



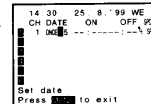
- If you record from the connected external equipment, make "L" or "SA" appear by pressing the I.SELECT button as follows:
L : Via the IN/OUT (SCART) socket on the rear panel
SA: From the satellite receiver connected to the SATELLITE (SCART) socket on the rear panel.

To make corrections:

Press the SHIFT (←) button to move back to the item, or the SHIFT (→) button to move forward.

- 6 Select a frequency of recording. (eg. once)

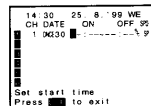
①



You can also set daily or weekly timer programme recordings. (See next page.)

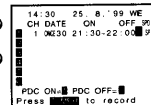
- 7 Set the recording date.

③ → ①



- 8 Set the recording start time and the off time.

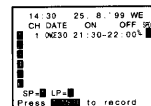
② → ① → ③ → ①
② → ② → ① → ①



- 9 To set PDC, press number button 1: if not set, press number button 2.

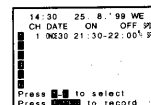
Note
If you have set the VTR to the satellite receiver control mode (SA displayed) in step 5, PDC cannot be set.

①



- 10 Select the tape speed (SP).

①



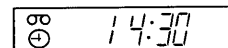
To set another programme, follow steps 4 to 10. In step 4, select next programme number.

- 11 Press the MENU button. Now programming is complete.

- 12 Press the two TIMER buttons simultaneously.



The power turns off and the VTR enters the timer standby mode.



Daily and Weekly Recording

Daily recording

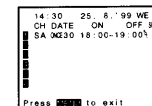
You can record TV programmes on the same channel at the same time Monday through Friday. Press number button 2 for "DAILY" in step 6.

Weekly recording

You can record TV programmes on the same channel on the same day and time every week. Press number button 3 for "WEEKLY", then number button 1 to 7 to select a day of the week in step 6.

Confirming the Timer Programmes (During the Timer Programme Recording)

Press the MENU button. The screen for confirming will appear.



After about 30 seconds, the screen disappears.

Changing/Cancelling the Timer Programmes

- 1) If the "E" indicator is lit, press the two TIMER buttons to turn it off, and then turn the VTR on by pressing the ON/STANDBY button.
- 2) With steps 2 to 11, change the items:
 - To cancel a programme, select the programme number you want to cancel in step 4, and press the CANCEL button. The line is then cleared.
- 3) Press the two TIMER buttons to return to the timer standby mode.

Recording or Playback in the Timer Standby Mode

First press the two TIMER buttons to release the timer standby mode, and then press the ON/STANDBY button to turn on the VTR. The VTR will be available for use.

- Be sure to press the two TIMER buttons again to return the VTR to the timer standby mode after you have finished.

Error Indication

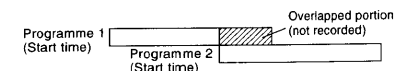
- The "E" (Error) indicator appears in the VTR display if you press the TIMER buttons when:
 - a cassette is not loaded.
 - the loaded cassette has no safety tab.
 - no timer programme is set.
 In these cases, a recording can not be made.

If a Power Failure Occurs During the Timer Programme Recording

- If the "E" indicator is missing in the VTR display after the power failure, the programmed contents have been cleared. Reset the timer programming.
- When power has failed for a short time, the colon of the current time display blinks. The programmed contents are not affected. Reset the clock.

Overlaps of the programmes

If two timer programmes overlap, the recording start time of programme 2 has priority over the recording off time of programme 1.



3 BASIC OPERATION 6 OPTIONAL SETTINGS / COUNTER FUNCTION

These functions will help your playback.

Optional Settings

You can easily make necessary settings using the on-screen display.

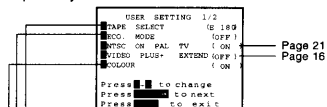
Preparation

- Turn on the VTR.
- Press the VTR button to set the remote controller operating the VTR.
- Select the video channel or video input mode on the TV.

- 1 Press the **MENU** button.
The MAIN MENU screen appears.



- 2 Press **number button 2** to select "USER SETTING".
For details on each item, refer to pages respectively as below.

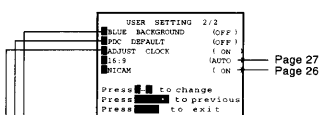


Press **number button 1** to select the used tape type.
The tape type changes as follows
→ E180 → E240 → E260 → E300

Press **number button 2** to turn on or turn off the VTR display during power standby. With "ON" set, VTR display will be cut-off to reduce energy consumption.

Press **number button 5** to select "OFF", if the TV programme or the tape is monochrome.

Press **SHIFT(→)** button to go to page 2/2 of USER SETTING.



With "ON" set, the TV screen automatically turns blue when:
—a selected channel is not broadcasting.
—no picture is recorded on the tape.
—no video signal is sent from the selected input source.
Pressing **number button 1** switches "ON" and "OFF".

With "ON" set, the PDC default setting for all timer programming will be set to on.
Pressing **number button 2** switches "ON" and "OFF".

With "ON" set, the VTR time is automatically updated.
Pressing **number 3** switches "ON" and "OFF".

- 3 Press the **MENU** button twice to return to exit.

Counter Function

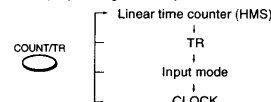
You can view the clock, linear time counter or tape remaining time in the VTR display or on the TV screen.

Preparation

Press the VTR button to set the remote control operating the VTR.

Counter Displays

Each time you press the **COUNT/TR** button, the VTR display changes in sequence as follows:



The indication above will also appear on the TV screen by pressing the **DISPLAY** button. They are switchable with the **COUNT/TR** button.

To reset the linear time counter to "0H00M00S"
The counter is automatically reset to "0H00M00S" when a cassette is ejected. If you want to reset at another point, such as the beginning of a new recording, just press the **COUNT/TR** and **CANCEL** button simultaneously.

Notes

- The linear time counter does not work on non-recorded portions on the tape.
- When the tape is ejected or the VTR is turned off, the display changes to clock.
- If the tape rewinds back over "0H00M00S", "—" appears in the VTR display.
- The displayed time of the linear time counter is only an approximation.

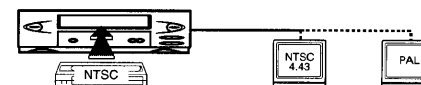
4 ADVANCED OPERATION 7 NTSC-RECORDED TAPE PLAYBACK

This VTR can play back an NTSC-recorded tape. You can watch the playback picture on a PAL system TV or an NTSC 4.43 system TV.

Setting for NTSC Playback

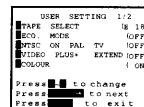
When you play back an NTSC-recorded tape on this VTR, make a setting on the USER SETTING screen according to your TV.

NTSC tape: tapes on which NTSC M system broadcasts mainly broadcast in the U.S. and Japan are recorded, and tapes recorded in the NTSC video system which are commercially available on the market.



Main System TV (NTSC 4.43 compatible)

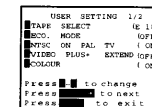
- 1 Press the **MENU** button to display the MAIN MENU screen.
- 2 Press **number button 2** to select "USER SETTING".
- 3 Set "NTSC ON PAL TV" to "OFF" by pressing **number button 3**.



- 4 Press the **MENU** button twice to exit.

PAL System TV

- 1 Press the **MENU** button to display the MAIN MENU screen.
- 2 Press **number button 2** to select "USER SETTING".
- 3 Set "NTSC ON PAL TV" to "ON" by pressing **number button 3**.



- 4 Press the **MENU** button twice to exit.

Note

With this VTR, an NTSC tape recorded in the SLP tape speed can be played back. But there are some points to be observed.

- The quality of the playback picture and sound are not clear.
- Variable speed playback (picture search, still, slow playback, etc.) can't be performed properly.
- Digital auto tracking may not be performed properly.

Notes for Using a PAL TV for NTSC Playback

- Use a TV compatible with PAL video signals of PAL 60 (525 lines).
When the TV, that is not compatible with PAL video signals of PAL 60, is used (when the TV, that is compatible only with PAL video signals of PAL 50 (625 lines), is used) NTSC playback pictures may roll up and down. This is not malfunction of the VTR or the TV. If your TV is equipped with a V-HOLD control, it may be possible to stop the rolling of pictures by adjusting this control.
About PAL 50 and PAL 60 of PAL video signals:
PAL 50 : is a normal signal and its PAL video signal is 50 fields (625 lines).
PAL 60 : is a special signal and its PAL video signal is 60 fields (525 lines).
Some TVs operate properly only with PAL 50 signals, some TVs operate properly with both PAL 50 and 60 signals.
Therefore, if your TV is switchable between PAL 50 (625 lines)/PAL 60 (525 lines), you can view an NTSC recorded tape in the PAL colour system with your own TV.
- Depending on the TV used, the picture may shrink vertically and black bars may appear both at the top and bottom of the TV screen. This is not an indication of malfunction.
- Variable speed playback (picture search, still, slow playback, etc.) may produce a skewed image and quite a bit of noise on the picture.
- If the tape pre-recorded in the SP tape speed mode is played back in the picture search mode, the picture may be reproduced with no colour.

Note

For viewing an NTSC-recorded tape, we recommend using an NTSC 4.43 TV.

4 2

ADVANCED OPERATION

VARIABLE SPEED PLAYBACK

You can play back a tape at various tape speeds.

Variable Speed Playback

A variety of tape speeds are available on this VTR.

Picture search: Plays back at 5 times or 9 times the normal playback speed so that you can quickly locate a particular scene.

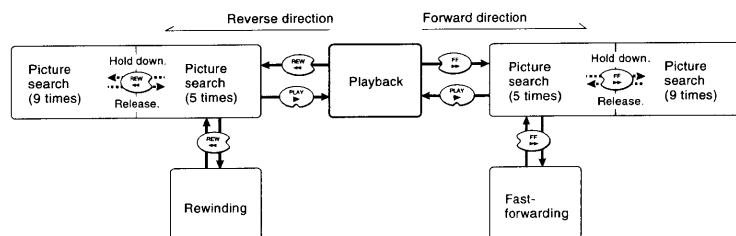
Still picture: Freezes the picture so that you can watch closer.

Slow-motion picture: Plays back at 1/6th or 1/12th the normal playback speed.

Frame advance: Advances the picture frame by frame

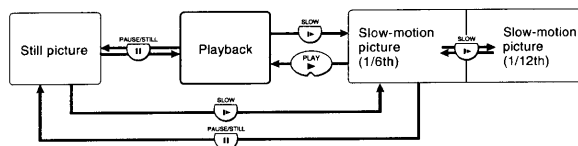
Picture Search

While playing back a tape, press the **FF** or **REW** button.
The tape runs at 5 times the normal playback speed.



Still Picture

While playing back a tape, press the **PAUSE/STILL** button.
The picture freezes.



Notes

- The still mode is automatically cancelled after about 5 minutes and returns to normal playback.
- The still picture may shake if a picture of a fast-moving object or scene is frozen. This is not a defect in the unit.

■ Adjusting Still Picture Stability

If the still picture is distorted or flickers, hold down one of the **CH/TRK** buttons until the picture becomes stable.

Note

The distortion of the still picture may not be eliminated completely.

Slow-motion Picture

While playing back a tape, press the **SLOW** button.
The tape runs at about 1/6th the normal playback speed.

Notes

- The slow-motion picture mode is automatically cancelled after about 5 minutes and returns to normal playback.
- The slow-motion picture may flicker up and down. This is not a defect in the unit.

■ Adjusting the Tracking Manually

If the slow-motion picture is noisy, hold down one of the **CH/TRK** buttons until the best picture is obtained.

Note

The noise in the slow-motion picture may not be eliminated completely.

Frame Advance

While the picture is frozen (see "Still Picture"), press the **PLAY** button repeatedly.
The picture advances one frame as you press the button.



If you press and hold the button, the tape runs at 1/25th the normal playback speed.

To resume normal playback, press the **PAUSE/STILL** button.



Notes

- If you playback a tape recorded in the LP or SLP tape speed or a tape recorded on another VTR in various speed mode, the picture maybe noisy or monochrome.
- When you use an NTSC-recorded tape, picture search and accelerated picture search, the slow-motion picture speeds are as follows.

	Accelerated picture search			
PAL (SP)	x5	x9	1/6	1/12
PAL (LP)	x5	x13	1/6	1/12
NTSC (SP)	x5	x7	1/7	1/15
NTSC (SLP)	x5	x15	1/7	1/15

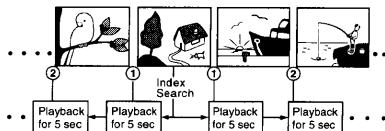
4 ADVANCED OPERATION INDEX SEARCH

You can easily locate the desired programme using the index signal registered on the tape.

About This Function

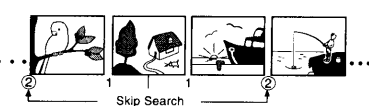
Index Search

The VTR plays back each programme with an index signal for about 5 seconds.



Skip Search

The VTR finds and plays back a programme with an index signal you specified.



To use this function, index signals have to be registered on your tape. For registering index signals, follow the procedure below.

Registering Index Signals

■ Registering index signals automatically

An index signal is automatically registered when a recording starts.

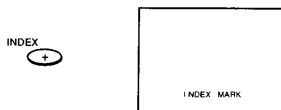
Notes

- An index signal is not registered when the VTR is in the recording pause mode and recording restarts.
- An index signal is also registered when a timer programme recording starts.

■ Registering index signals manually

Index signals can be manually registered at desired points on the tape during recording.

Press the INDEX (+) button at a desired point.



Note

When registering two or more index signals, certain intervals are required: more than 1 minute in the SP tape speed and more than 2 minutes in the LP tape speed.

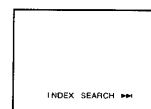
Index Search

This function plays back the tape for about 5 seconds at each index signal.

1 Load a cassette with the index signals registered.

2 Press the INDEX (-) or (+) button in the stop or playback mode.

INDEX (-) : to search in the reverse direction
INDEX (+) : to search in the forward direction



The VTR fast-forwards or rewinds the tape. When an index signal is found, the VTR plays back the tape for about 5 seconds, and then resumes fast-forwarding or rewinding. This is repeated each time at an index signal.

3 Press the PLAY button when the desired programme is found. Normal playback starts.



Notes

- At the very beginning of the tape, the index search function may not work properly.
- If you registered the index signals on a tape recorded on another VTR, the recording may be blurred at the index point and the index search may not work properly.

Skip Search

This function fast-forwards or rewinds the tape to the point at which the selected index signal is registered, and starts playback from there.

1 Load a cassette with the index signals registered.

2 Press the INDEX (-) or (+) button twice in the stop or playback mode.



3 Press the INDEX (-) or (+) button depending on the direction where your desired programme is located.

Each time you press the (-) or (+) button, the number decreases or increases respectively.

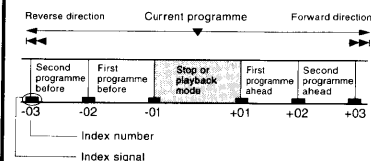


The VTR starts to search for the point you specified with the (-) or (+) button. When the point is found, playback will start automatically.

Notes

- You can set an index number up to ± 20 .
- The skip search is cancelled when the PLAY or STOP button is pressed.

Locating the Index Number



[Example]

- To locate the beginning of first programme before, press the INDEX (-) button three times to set the index number -02.
- To locate the beginning of next programme ahead, press the INDEX (+) button twice to set the index number +01.

4 ADVANCED OPERATION NICAM COMPATIBILITY / AUDIO SELECT

This VTR incorporates a special decoder that can receive NICAM broadcast programmes.

NICAM Broadcast Programme

NICAM programmes are divided into 3 types. NICAM Stereo, NICAM Mono and Bilingual (transmission in another language). NICAM programmes are always accompanied by a standard mono sound broadcast and you can select the desired sound on the screen (for recording) or with the A.SELECT button (for playback).

NICAM Broadcast Setting

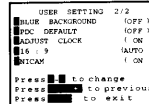
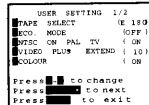
- 1 Press the **MENU** button.



- 2 Press number button 2.

2

- 3 Press the **SHIFT(→)** button and number button 5 to set "NICAM" to "ON".



ON: Normally set at this position.
OFF: Only set at this position to record the standard mono sound during a NICAM broadcast if the stereo sound is distorted due to inferior reception conditions.

- 4 Press the **MENU** button twice to exit.

This unit's Hi-Fi stereo audio track (2-channel) can be used to playback an excellent Hi-Fi sound. Sound that has been recorded on the normal audio track is compatible with conventional VTR'S

When playing back a Hi-Fi recorded tape, press the **A.SELECT** button to select desired sound output. The [L], [R] indicators in the VTR display tell you what kind of sound output you are selecting. Accordingly, you can select the desired sound output while observing the lit and/or unlit indicators.
(See above "Monitoring Sound Output".)

Monitoring Sound Output

When monitoring a TV programme or playing back a Hi-Fi recorded video tape, press the **A.SELECT** button to select a desired sound output. As the **A.SELECT** button is pressed, the sound output and the indicator change as below:

Sound type	Stereo sound	Bilingual sound	Standard sound broadcast
VTR display	Heard in stereo. (left channel and right channel)	Channel I (MAIN) heard from the left speaker, Channel II (SUB) from the right speaker.	Heard in monaural.
Left channel heard from both the left and right speakers.	Channel I (MAIN) heard from both the left and right speakers.	Heard in monaural.	
Right channel heard from both the left and right speakers.	Channel II (SUB) heard from both the left and right speakers.	Heard in monaural.	
Heard in monaural.	Channel I (MAIN) heard from both the left and right speakers.	Heard in monaural.	
Sound mixed the left and right channel, and the normal audio track. (See below).			

Sounds of a recorded TV programme

This VTR is capable of recording sound in Hi-Fi system. Stereo broadcasts and bilingual sound broadcasts are recorded in its original sound system regardless of the setting. (See the list above.)

Notes

- When listening to a stereo broadcast or playing back a Hi-Fi tape recorded in stereo, you have to connect the VTR with the stereo audio system or the stereo TV with a SCART cable.
- The sound which is output from the AERIAL OUTPUT socket is monaural.
- If a tape which is not Hi-Fi recorded is played back, [L], [R] indicators go off automatically and the sound output is monaural.

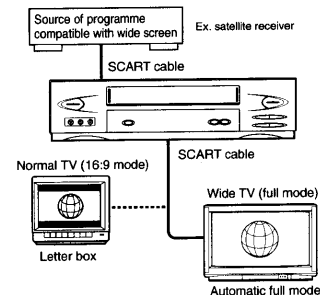


4 ADVANCED OPERATION 16:9 (WIDE SCREEN) COMPATIBILITY

This VTR is compatible with the 16:9 (Wide Screen) format.

16:9 (Wide Screen) Compatibility

The VTR automatically adjusts the image to fill the wide TV screen when you play back a tape commercially available which is recorded in the wide screen format, or when you record or play back a wide TV programme via the connected satellite receiver, etc.



Important

Connect equipment compatible with wide screen, to the VTR using the SCART cable.

Setting of 16:9 Wide Screen

- 1 Press the **MENU** button.

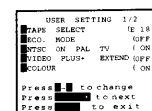
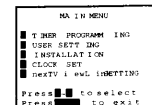


- 2 Press number button 2.

2

- 3 Press **SHIFT(→)** button and number button 4 to set "16:9".

4



AUTO: Set when you use a wide TV.
The VTR detects wide TV programmes and normal TV programmes automatically when playing back and recording.
ON: The VTR always plays back and records in the mode compatible with 16:9 wide screen.
Set if the VTR cannot detect wide TV programmes with "AUTO" set.
OFF: Set if you do not use a wide TV.

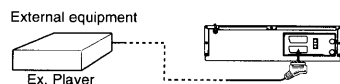
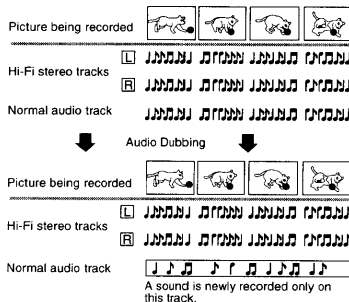
- 4 Press the **MENU** button twice to return to the normal TV screen.

4 ADVANCED OPERATION 6 EDITING

Using another VTR or external equipment, you can copy a tape.

Audio Dubbing

You can record sounds by importing from an external equipment connected to the LINE IN jacks, onto the normal audio track of a pre-recorded tape, without erasing the pictures or sounds on the Hi-Fi stereo track.



Preparation

To import sounds from an external equipment, connect it to the LINE IN jacks.

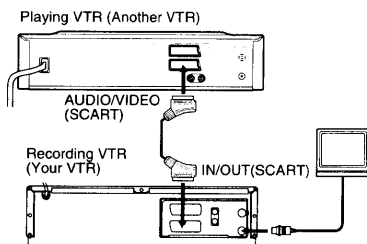
- 1 Load a cassette you want to make audio dubbing on. **19**
 - 2 Press the **PLAY** button to start playback. **22**
 - 3 Press the **PAUSE/STILL** button where you want to start audio dubbing. **27**
 - 4 Press the **A.DUB** button. **22**
- Some flickers may be produced on the screen. This is not a malfunction.
- 5 Press the **PAUSE/STILL** button to start audio dubbing. Play the sound from the external equipment. **22**

Notes

To monitor the recorded sound, press the A.SELECT button to select the sound output. (See page 26.)

Tape Copying

Using another VTR or external equipment, you can copy a tape.



Important

It is permissible to record television programmes only in the event that third party copyrights and other rights are not violated.

- 1 Press the **I.SELECT** button so that the VTR display shows "L". **2**
- 2 Press the **SP/LP** button to select the recording tape speed. **9**
- 3 Play the tape on the playback VTR and press the **REC** buttons to start recording on this VTR. **6**
- 4 Press the **STOP** button on each VTR when copying is finished. **21**

Notes

The picture quality of the copied tape is slightly less than the original picture quality.

4 ADVANCED OPERATION 7 MULTI BRAND REMOTE CONTROLLER (V-729B only)

The remote controller can be compatible with various brands of TV by setting their control codes. The TOSHIBA code has initially been set to control TOSHIBA TVs.

Setting Control Codes

- 1 While holding down the **TV** button, enter the two digits of your TV's brand code (listed right) using **number buttons**. **27**
- 2 Release the **TV** button. **27**
- 3 Point the remote controller at your TV and use each button listed below to make sure that your TV is operated correctly. **27**

ON/STANDBY	To turn the TV on or off.	12
CH	To select TV channels in the upper or lower direction.	13
VOL (Volume)	To adjust the sound level.	14
INPUT SELECT	To select an external source such as a VTR.	2
Number buttons/ ENTER button	To select TV channels. Way of use may differ with models of TV. Check how they work on your TV.	1 15
Ex. To select channel 3:		
• 0→3		
• 0→3→ENTER		
• ENTER→3		
To select channel 16:		
• 1→6		
• 1→6→ENTER		
• ENTER→ENTER→1→6		

Important

Some TVs may not respond to all the operations above, or may not be operated at all with this remote controller. In this case, operate your TV with its own remote controller.

Notes

- For some brands, several control codes (brand codes) are allocated. Try each of them until the buttons work on your TV.
- If you replace the remote controller's batteries, set the brand code again.

Table of Brand Codes

Brand name of your TV	Brand code
TOSHIBA	01, 14, 15, 16, 17, 19
AKAI	08
BANG & OLUFSEN	20
BLAUPUNKT	04
BRANDT	11
BRIONVEGA	20
CGE	19
CONTINENTAL EDISON	22
FERGUSON	11, 24, 25
FINLUX	02, 15, 20
FISHER	08
FORMENTI	20
GOLDSTAR	02
GRUNDIG	04, 15, 19
HITACHI	06, 10, 11, 22
IMPERIAL	19
JVC	07
LOEWE	02
LOEWE OPTA	02, 20
METZ	20
MITSUBISHI	02, 09, 14
MIVAR	19
NOKIA	21
NORDMENDE	10, 11, 22
PANASONIC (NATIONAL)	03, 21, 26
PHILIPS	02, 18, 20
PHONOLA	02, 18, 20
PIONEER	11, 21
RADIOLA	02, 18
RADIOMARELLI	20
REX	21
SABA	10, 11, 20, 21, 22
SALORA	21
SAMSUNG	02
SANYO	08, 14, 27, 28, 29, 30
SCHNEIDER	02
SELECO	21
SHARP	05, 14, 27
SIEMENS	04
SINGER	20
SINUDYNE	20
SONY	13, 14
TELEAVIA	11
TELEFUNKEN	11, 24
THOMSON	10, 11, 22
WEGA	20
YOKO	02

4 8

ADVANCED OPERATION
nexTVViewLink

If your TV has the "EasyLink / nexTVViewLink" function, the VTR makes your VTR's setup and operations easier.

nexTVViewLink FUNCTION of this VTR

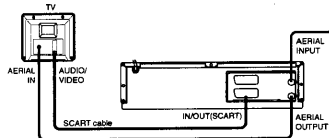
Using a SCART cable (21 pins), a mutual control is available with the TV, VTR, SAT receiver, etc.

- The VTR automatically stores all your current TV stations in the VTR in the same position order as the TV channels. ("TV CH P. DOWN LOAD")
- Even if the TV is in standby mode, the TV automatically turns on and displays the video picture when you start playback on the VTR.
- The VTR automatically selects the same picture as you are watching on the TV, and record it. ("TV PICTURE RECORD")
- The VTR takes in the data and turns to timer standby mode, after a programme data reserved is transferred to the VTR by a TV using such as a EPG (Electronic Programme Guide). In this case, the TV's and the VTR's channel position must be set to the same TV station. The position could be stored from 1 to 99. Also the VTR's clock must be set.

Connection

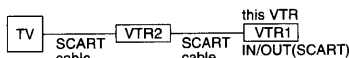
Connect your EasyLink / nexTVViewLink TV to the AUDIO/VIDEO (SCART) socket on the VTR using the SCART cable. Refer to your TV's manual additionally.

■ Connection to your EasyLink / nexTVViewLink TV

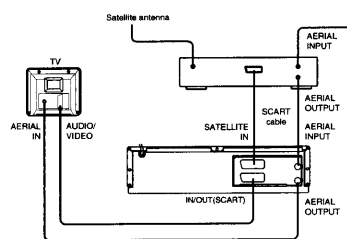


When connecting another VTR supporting EasyLink / nexTVViewLink functions

The "nexTVViewLink" system can connect 2 VTRs (VTR1 and VTR2) at the same time. This VTR is adjusted to "VTR1", so it should be connected to VTR2.



■ Connection to your EasyLink / nexTVViewLink TV and a satellite receiver



TV CH P. DOWN LOAD

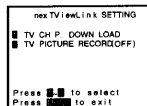
Preparation

- Turn on the TV.
- Select the video channel or the video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR.

1 Press the **MENU** button to display the MAIN MENU screen.

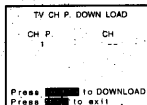
2 Press **number button 5** to select "nexTVViewLink SETTING".

5

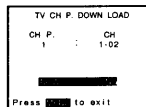


3 Press **number button 1** to select "TV CH P. DOWN LOAD".

1



4 Press the **SHIFT** (→) button to start downloading.



5 When the downloading is finished, the "nexTVViewLink SETTING" screen returns.

6 Press the **MENU** button twice to exit.

Notes

- The available position numbers on the VTR are 1 to 99.
- When the TV's channel position is readjusted, the VTR automatically makes "TV CH P. DOWN LOAD".

TV PICTURE RECORD

Preparation

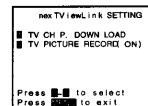
- Turn on the TV.
- Select the video channel or the video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR.

1 Press the **MENU** button to display the MAIN MENU screen.

2 Press **number button 5** to select "nexTVViewLink SETTING".

3 Press **number button 2** to set "TV PICTURE RECORD" to "ON".

2



4 Press the **MENU** button twice to exit.

1 Load a cassette with the safety tab attached.

2 Press the **SP/LP** button to select the recording tape speed.

3 Press the **REC** button on the VTR, or simultaneously press the two **REC** buttons on the remote controller.



The VTR automatically selects the same picture as you are watching on the TV, and starts recording. Depending on the picture sources, the recording switches the method. See below.

4 Press the **STOP** button to stop recording.

Notes

- This recording is not available on the timer programme recordings.
- When you do not perform "TV PICTURE RECORD", set "TV PICTURE RECORD" to "OFF".
- If the TV has a key to operate the TV picture recording, the "TV PICTURE RECORD" could be started from the TV. In this case, the VTR's "TV PICTURE RECORD" must be set to "ON".

Picture and TV PICTURE RECORD

Picture	The VTR records:	During recording, if you change the channel or the input mode on the TV, the recording will be:
Channel selected on the TV If you performed "TV CH P. DOWN LOAD" (TV stations stored on the VTR and the TV in the same position order).	VTR channel of the same number as the TV channel	Ex. TV channel 1 Continued.
If you did not perform "TV CH P. DOWN LOAD" (TV stations not stored on the VTR and the TV in the same position order).	LINE (output of the TV)	Stopped.
Pictures of external equipment connected to the TV	LINE (output of the TV)	Stopped.
Channel selected on the VTR	VTR channel	Ex. VTR channel 1 Continued.

5 SATELLITE CONTROL OF SATELLITE CHANNELS

Your satellite channels can be selected or changed on this VTR via the connected satellite receiver, same as TV channels.

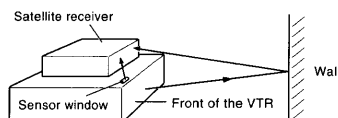
Setting to Control Satellite Channels

You can select satellite channels by operating this VTR.

It is also possible to automatically change the satellite channels according to your programme setting in the timer programme recording (page 18).

Important

Put the satellite receiver on the top of the VTR as shown below. Do not block the sensor window.



The infrared signals come out of the sensor window and the front of the VTR. Then they bounce off walls and other objects in the room and are received by the satellite receiver. The VTR sends out infrared signals to your satellite receiver even during timer programme recording.

Note

If the channels cannot be controlled properly because the infrared signal fails to reach the satellite receiver, change the position of the satellite receiver on the VTR so that it can receive the signal.

Preparation

- Keep the connected satellite receiver turned on.
- Make sure your satellite receiver is connected to the VTR correctly. (See page 10.)
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR.

1 Press the **MENU** button to display the MAIN MENU screen.

2 Press **number button 3** to select "INSTALLATION".

3

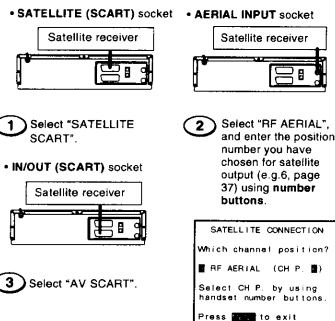
INSTALLATION MENU
 ■ AUTO SET UP
 ■ MANUAL SET UP
 ■ SATELLITE SETTING
 ■ SAT. CONNECTION (SAT)
 ■ SAT. BRAND NO. (17)
 ■ VIDEO PLUS+ GUIDE CH
 Press **3** to select
 Press **ENTER** to exit

3 Press **number button 3** to select "SATELLITE SETTING".

3

SATELLITE CONNECTION
 How is your satellite receiver connected?
 ■ SATELLITE (SCART) socket
 ■ RF AERIAL (CH P. 1)
 ■ AV-SCART (LINE)
 Press **3** to select
 Press **ENTER** to exit

4 Select 1 to 3 using **number buttons** as below depending on your satellite receiver connection.



After you select 1 to 3, the screen changes as below.

SATELLITE BRAND NO.
 What is brand of your satellite?
 SAT. BRAND NO. (000)
 Refer to owner's manual for 3 digit brand No.
 Enter SAT. BRAND NO. even if it is correct.
 Press **ENTER** to exit

5 Enter three figures of the brand code for your satellite receiver by **number buttons**. Check the brand code list (page 33).

Ex. To enter brand code 33.

0 → 3 → 3

SAT. BRAND NO. (033)
 Sending a test signal of Ch. 12 to your satellite

When you enter the brand code, the VTR sends a test signal to the satellite receiver to make sure that the brand code has been entered correctly. The signal will set the satellite channel to 12. If channel 12 is displayed on your satellite receiver, it means the brand code is set correctly.

Several codes may be allocated to one brand. Enter one after the other until the channel shows 12.

OLD SAT. CH. change to 12?
 YES Press **3**
 NO Try another No.
 SAT. BRAND NO. (033)
 If all numbers entered second SAT. CONTROL ON NEXT ACCESS.
 Press **ENTER** to RESELECT

6 Press the **MENU** button.

7 Select 1 to 4 using **number buttons** as below depending on your satellite receiver.

Select ...

- If the channel of SKY ONE is 1*.
- If the channel of SKY ONE is 8*.
- If the order is personal choice.
- If your satellite receiver did not change to channel 12 in step 5.

* Refer to the "GUIDE Channel Table" (page 38).

If 1, 2 or 4 is selected, the screen returns to the INSTALLATION MENU of your setting after a few seconds.

INSTALLATION MENU
 ■ AUTO SET UP
 ■ MANUAL SET UP
 ■ SATELLITE SETTING
 ■ SAT. CONNECTION (SAT)
 ■ SAT. BRAND NO. (17)
 ■ VIDEO PLUS+ GUIDE CH
 Press **3** to select
 Press **ENTER** to exit

SATELLITE CH ORDER
 How is your satellite receiver tuned?
 ■ SKY ORDER
 ■ ASTRA ORDER
 ■ PERSONAL PREFERENCE
 ■ NO SATELLITE CONTROL
 Press **3** to select
 Press **ENTER** to exit

If you selected 3, the screen changes as below.

It is necessary to make the setting of the GUIDE channels on this screen. Follow steps from 4 on page 35 to set "CH P." column for all your satellite channels.

GUIDE CH P.
 15 15
 16 16
 101 101
 102 102
 103 103
 Enter CH P. or LINE
 Press **3** to change
 Press **ENTER** to exit

8 Press the **MENU** button several times until you return to the normal TV screen.

Controlling Satellite Channels

■ Using the remote controller of this VTR

1) Press the **SAT.CONT.** button to make "SAT" appear in the VTR display.

2) Select a desired satellite channel using **number buttons**. Way of use may differ. Check how they work on your satellite receiver.

Ex. To select channel 16:
 • 0→3
 • 0→3→ENTER
 • ENTER→3
 To select channel 16:
 • 1→6
 • 1→6→ENTER
 • ENTER→ENTER→1→6

Important

Some satellite receivers may not respond to all the operations above, or may not be operated at all with this remote controller. In this case, operate your satellite receiver with its own remote controller.

Notes

- Each time the SAT.CONT. button is pressed, this function goes on or off.
- To make a position number appear in the VTR display after you have cancelled this function, press the I.SELECT button.

■ Changing satellite channels automatically in the timer programme recording

When timer recording programming, press the **SAT.CONT.** button to display "SAT" on the screen, and then enter a desired satellite channel using **number buttons** (step 5, page 18).

Go through steps 1) and 2) above beforehand and confirm that channels are properly selected.

Note

Keep the satellite receiver turned on even while the VTR is in the timer programme recording.

Table of Satellite Receiver Brand Codes

Brand name	Brand code
TOSHIBA	17, 33
ALBA	1, 2, 9, 16, 17, 65, 66
AMSTRAD	3, 4, 5, 17, 55, 56, 76, 77, 89, 90, 91, 124
ARMSTRONG	17, 43
BIG BROTHER	7, 8, 17
BT	17, 122, 123
BUSH	2, 9, 16, 17, 65, 66
CABLE STAR	17, 101, 102, 103, 104
CABLETIME	17, 101, 102, 103, 104
CAMBRIDGE	17, 122, 123
CHANNEL MASTER	2, 3, 10, 17
D2MAC DECODER	17, 72
DRAKE	17, 45
ECHOSTAR	13, 14, 17, 92, 93, 94
FERGUSON	9, 15, 16, 17, 23, 38, 39, 59, 108
GRUNDIG	17, 19, 28, 71, 125
ITT/NOKIA	17, 26, 27, 50, 51, 52
JVC	17, 122, 123
LENCO	17, 49
MASPRO	17, 20, 64, 67
MATSUI	17, 125
NEC	17, 22, 57
NETWORK	9, 16, 17

Brand name	Brand code
NORDMENDE	17
PACE	9, 16, 17, 23, 38
PANASONIC	17, 61
PHILIPS	16, 17, 24, 46, 73
REDIFFUSION	17, 25
REVOX	17, 21
SAKURA	17, 62, 63, 68
SALORA	17, 26, 27, 50, 51, 52
SAMSUNG	17, 36
SIEMENS	17, 23
SENTRA	10, 17
SONY	17, 30
TATUNG/NIKKO	17, 32, 54, 58, 80, 81
TEXSCAN	17, 119, 120
THOMSON	7, 17, 39
TRISTAR	17, 31
UNIDEN	17, 67
VIDEOTRON	17, 105, 106, 107, 108, 109, 110, 121
WISI	17, 35, 37, 44, 93

- For some brands, several brand codes are allocated.
- Some satellite receivers may not be operated at all with this VTR.

6 MANUAL SET UP

The manual procedure of Auto Set Up will help an additional TV station storing or clock resetting, etc.
This VTR can store up to 99 positions for TV stations.

Reset-Up Automatically

Use this procedure if the Auto Set Up needs to be made again, for example, after a power failure, when plugged off, or in the event of receiving stations change.

Preparation

- Turn on the TV, and select the video input mode or video channel if you made the aerial connection (page 10).
- Press the VTR button to set the remote control operation your VTR.
- If your satellite receiver is connected using an RF lead, select SKY ONE on the satellite receiver. Auto Set Up will allocate position number 6 on the VTR for the satellite output.

1 Press the **ON/STANDBY** button to turn on the VTR.

2 Press the **MENU** button to display the MAIN MENU screen.

MENU



3 Press number button 3 to select "INSTALLATION".

3

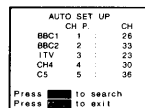


4 Press number button 1 to select "AUTO SET UP".

1

The VTR starts automatic TV station storing and clock setting if you press the **SHIFT** (→) button.

SHIFT



Note
If "—" is shown, perform "Manual Storing of TV Stations" (page 37) for the TV station.

5 Press the **MENU** button four times to return to the normal TV screen.

Notes

- If the time of the clock is not correct after this procedure, perform "Clock Setting" on this page.
- The TV stations in tuning range numbers 2 and 3 are not stored automatically in this procedure. To receive these stations, you must store them manually. See "Manual Storing of TV Stations" on page 37.

Clock Setting

If BBC1 is stored in position number 1, the VTR automatically sets the clock, and will adjust it to the BBC1 signal at 8:00 every morning.

If BBC1 is not stored in position number 1, follow the procedure below to set the clock.

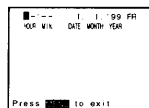
The item to be set blinks. You can change the position by pressing the **SHIFT** buttons.

Example To set the clock to 14:30 on August 25, 1999

1 Press the **MENU** button to display the MAIN MENU screen.

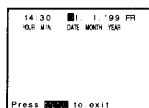
2 Press number button 4 to select "CLOCK SET".

4



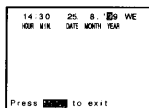
3 Set the hours and minutes. (24 hours clock format)

1 → 4 → 3 → 0



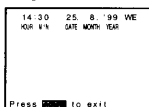
4 Set the day and month.

2 → 5 → 0 → 8



5 Set the year with its last two digits.

9 → 9



6 Press the **MENU** button. Now the clock starts.

MENU



7 Press the **MENU** button again to exit.

Manual Storing of TV Stations

Information

Each TV station operating in the U.K. (e.g. BBC1, ITV) broadcasts on a unique frequency, which in turn has been allocated a transmission channel number (21 – 69). However, this unique frequency and corresponding number changes for each TV station from area to area. For example, BBC1 in London uses channel number 26, while in Oxford BBC1 uses channel number 57 (i.e., CH57). This VTR will indicate these channel numbers (1 – 9, 21 – 69) during tuning.

Tuning range number	Band	TV channel number
–	VHF	A – J (1 – 10), 11, 13 E2 – E12 (82 – 92)
–	UHF	E21 – E69 (21 – 69)
–	CATV	X, Y, Z (71, 72, 73)
2	CATV	1 – 53 (48MHz to 464MHz, 8MHz steps)
3	CATV	S1 – S41 (1 – 41)

Preparation

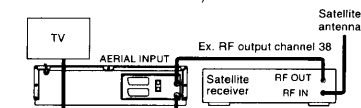
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR.
- Turn on the VTR.
- If you use a satellite receiver, make the connection correctly (page 10) and turn it on.

Example To store BBC1 to position number 1 on your VTR.

Allocation of the TV stations into the memory of the VTR is expected to be as follows, for VIDEO Plus+ Deluxe programming system recording.

BBC1: Position number 1
BBC2: Position number 2
ITV: Position number 3
CHANNEL 4: Position number 4
CHANNEL 5: Position number 5

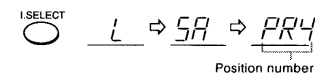
Satellite: Position number 6, example (if connected by an RF lead only as shown below.)



In this case, select position number 6 in step 5, and channel 38 in step 6 if the output channel of your satellite receiver is 38, for example. Make sure that TV receives a satellite broadcast. Whenever you watch or record a satellite programme, select position number 6.

Important

This procedure can be performed only when the VTR display shows a position number on the VTR. If the "L" or "SA" is displayed, press the **I.SELECT** button so that the position number appears.



1 Press the **MENU** button to display the MAIN MENU screen.

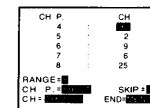
2 Press number button 3 to select "INSTALLATION".

3 Press number button 2 to select "MANUAL SET UP".

4 Press number button 2 to select "MANUAL TUNING".

The VTR is now in the tuning mode, and the screen display appears.

2



5 Press the **SHIFT** button to select position number 1.

SHIFT

6 To change the tuning range number
Press number button 6 repeatedly to select a tuning range number. (See the table on left.)

6

6 Press and hold the **CH/TRK** button to start searching for BBC1.

Higher numbered channel

CH/TRK

Lower numbered channel

If the received TV signal is not BBC1, press and hold the **SHIFT** button again.

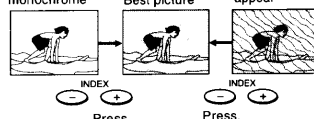
(continued)

6 MANUAL SET UP MANUAL SET UP

(continued)

- 7** If a clear picture does not appear on the TV screen after searching is finished, make fine adjustment with the INDEX (-) (+) buttons.

If the picture is monochrome



- 8** Repeat steps 5 to 7 for other TV stations, and for satellite stations if your satellite receiver is not connected by a SCART.

Record all position numbers you stored on the VTR in the chart (GUIDE Channel Table) so that you will be ready to use the Video Plus+ Deluxe programming system recording.

- 9** Press the **MENU** button. Channel tuning is now finished.

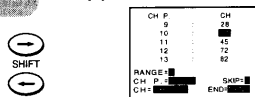
Once station storing is done, you can select a TV programme by the position number on which the TV station is stored.

Skipping Channels

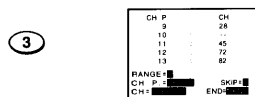
You can prevent the use of certain position numbers.

- Set the VTR to the tuning mode following steps 1 to 4 of the station storing procedure.
- Select the position number you want to skip with the **SHIFT** button.

To skip position number 10.



- 3** Press **number button 3**. The following indication will appear in the VTR display with the skip function on or off.



If you press **number button 3** again, the TV channel number will appear and the skip function will be cancelled.

- 4** Press the **MENU** button to exit.

To cancel channel skipping
Follow steps 1) to 4) above.

GUIDE Channel Table

TV stations	GUIDE	Position number in which the TV station has been memorized on the VTR.
BBC1	001	1
BBC2	002	2
ITV	003	3
CHANNEL 4	004	4
CHANNEL 5	005	5
RTE (IRELAND)	006	
NETWORK 2 (IRELAND)	007	

STATION NAME	VIDEO Plus+ SYSTEM GUIDE CHANNEL	SKY ORDER	ASTRA ORDER	PERSONAL PREFERENCE
SKY ONE	101	1	8	
SKY NEWS	102	2	12	
SKY MOVIE MAX	103	3	16	
SKY PREMIERE	104	4	18	
THE DISNEY CHANNEL	111	5	26	
SKY BOX OFFICE 1	111	5	26	
SKY SPORT 1	105	6	20	
NICKELODEON	106	7	46	
PARAMOUNT COMEDY CH.	106	7	46	
EBN	125	8	42	
TROUBLE	125	8	42	
BRAVO	125	8	42	
DISCOVERY HOME & LEISURE	124	9	41	
DISCOVERY	124	9	41	
UK GOLD	123	11	23	
QVC	136	12	38	
LIVING	130	13	34	
THE FANTASY CHANNEL	130	13	34	
MTV	109	14	15	
VH1	145	15	22	
SKY SPORTS 2	140	16	47	
SKY SPORTS 3	148	17	31	
PLAYBOY CHANNEL	148	17	31	
TV SHOP	148	17	31	
FOX KIDS	119	18	7	
NATIONAL GEOGRAPHIC	119	18	7	
GRANADA PLUS	131	19	3	
MEN & MOTORS	131	19	3	
WEATHER	127	20	60	
RACING	127	20	60	
SKY BOX OFFICE 2	127	20	60	
SKY BOX OFFICE 3	132	21	59	
SKY SCOTTISH	132	21	59	
GRANADA GOOD LIFE	142	22	58	
COMPUTER CHANNEL	142	22	58	
SKY BOX OFFICE 4	142	22	58	
CMT	138	24	51	
CHRISTIAN CHANNEL	122	26	24	
SOAP	122	26	24	
HISTORY	122	26	24	
SCI-FI	122	26	24	
TRAVEL	129	27	60	
SKY CINEMA	129	27	60	
CARTOON NETWORK	149	29	37	
TNT	149	29	37	
EUROSPORT	107	30	4	
CNN	126	31	28	

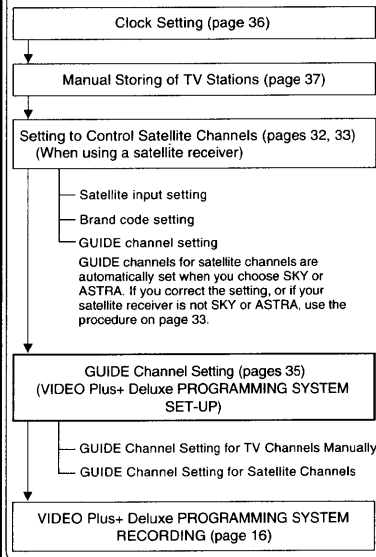
* 1 Note: It is important that you check that your VIDEO Plus+ programming system Guide channel order stored on your VTR is the same order as your Satellite Receiver otherwise VIDEO Plus+ programming system will not work correctly.

GUIDE Channel Setting for TV Channels Manually

VIDEO Plus+ Deluxe programming system is a timer recording system for an easier programming that requires you only to enter a PlusCode programming number assigned to a desired programme. This section explains the necessary set-up to make VIDEO Plus+ Deluxe programming system recordings.

Information

You can perform timer recording very easily using the VIDEO Plus+ Deluxe programming system of this VTR. Before making a VIDEO Plus+ Deluxe programming system recording, it is necessary to set GUIDE channels in the VTR.



Important

There is no need to perform this procedure if the TV stations have been stored to the position numbers (1 for BBC1, 2 for BBC2, 3 for ITV, 4 for CHANNEL 4 and 5 for CHANNEL 5) on the VTR (page 12).

Preparation

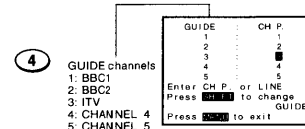
- Select the video channel or video input mode on the TV.
- Press the VTR button to set the remote control operation your VTR.

- 1** Press the **MENU** button to display the MAIN MENU screen.

- 2** Press **number button 3** to select "INSTALLATION".



- 3** Press **number button 4** to select "VIDEO PLUS+ GUIDE CH".



GUIDE channels 1 to 5 have been factory set to position numbers 1 to 5 respectively. Make sure that the numbers are matched as above.

Note

To set another TV channel, select the GUIDE channel using the SHIFT button, and in the "CH P." column enter the position number in which you have stored the TV station by number buttons.

- 4** Press the **MENU** button three times to exit. The GUIDE channel setting for TV channels is complete.

Now you can make a VIDEO Plus+ Deluxe programming system recording of TV programmes. (See page 16.)

If you use a satellite receiver, make the GUIDE channel setting for satellite channels as well.